

Nanophotonic biosensors for detecting pathogens - Defense Wide

Proposed Recipient: University of Georgia, Department of Infectious Diseases

Address of Proposed Recipient: 111 Carlton St. – AHRC, Athens, GA 30602;

Amount of Request: \$1.9 million

Explanation of Request

Purpose: The project will develop nanophotonic biosensors to facilitate direct, rapid, and extremely sensitive detection of bioagents and pathogens using surface enhanced Raman spectroscopy (SERS). Allows for simultaneous detection of extremely low levels of analytes in biomaterial while providing structural and quantitative information about the analytes – features currently not available with state-of-the-art biosensors and detectors

Why is it a good use of Taxpayer funds: Critical need for a rapid and sensitive means of detecting bioagents/pathogens that cause disease and rising mortality rates, particularly those that pose threats as agents for bioterrorism and military personnel.